

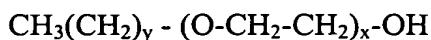
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This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS**

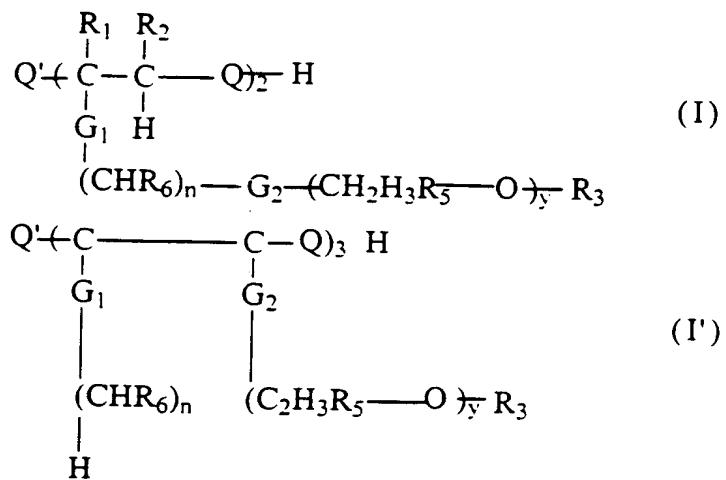
101. (Currently Amended) A method for preparing a drug targeting system for administering one or more physiologically effective substances to a mammal, said method comprising:

a) preparing nanoparticles made of a polymeric material, said nanoparticles being free of a surfactant surface coating and comprising said polymeric material, one or more physiologically effective substances to be delivered to said mammal, and one or more stabilizers for said nanoparticles allowing targeting of said one or more physiologically effective substances to a specific site within or on a mammalian body, said one or more stabilizers being selected from the group consisting of polysorbate 85, polysorbate 81, dextran 12,000, carboxylic acid esters of glycerol, sorbitan monostearate, sorbitan monooleate, polyoxamer 188, polyoxarnines, alkoxyLATED ethers, alkoxyLATED esters, alkoxyLATED mono-, di and triglycerides, alkoxyLATED phenols and diphenols, Genapol® compounds, Bauki® compounds<sup>R</sup>, sodium stearate, metal salts of carboxylic acids, metal salts of alcohol sulfates and metal salts of sulfosuccinates and mixtures of two or more of said substances, wherein said Genapol<sup>R</sup> compounds are of the formula



wherein y is in the range of 4 to 18 and x is in the range of 1 to 18,  
and said Bauki<sup>R</sup> compounds are of the formulas (I) or (I')

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in which  $\text{R}_1$ ,  $\text{R}_2$ ,  $\text{R}_5$  and  $\text{R}_6$  are identical or different and represent hydrogen and a methyl or ethyl group,

$\text{Q}'$  represents a valency, oxygen or an ester or amide bridge and  $\text{Q}'$  denotes hydrogen if  $\text{Q}$  represents a valency or oxygen, and is a hydroxyl or amino group if  $\text{Q}$  represents an ester or amide bridge,

$x$  is an integer from 3 to 50, if  $\text{Q}$  is a valency or oxygen, and an integer from 3 to 1000, if  $\text{Q}$  is an ester or amide function,  $\text{G}_1$  and  $\text{G}_2$  are a valency, oxygen or an ester or amide group, it being possible for the two groups to be identical or different,  $n$  is an integer from 4 to 44,

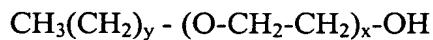
$y$  is an integer from 2 to 50, and  $\text{R}_3$  is hydrogen or a lower alkyl having 1-6 C atoms, and; by polymerizing one or more monomeric or oligomeric precursors of said polymeric material or both, in the presence of said one or more physiologically effective substances and in the presence of said stabilizers; and optionally

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b) providing said nanoparticles in a medium allowing the transport of said nanoparticles to a target within or on said mammal after administration.

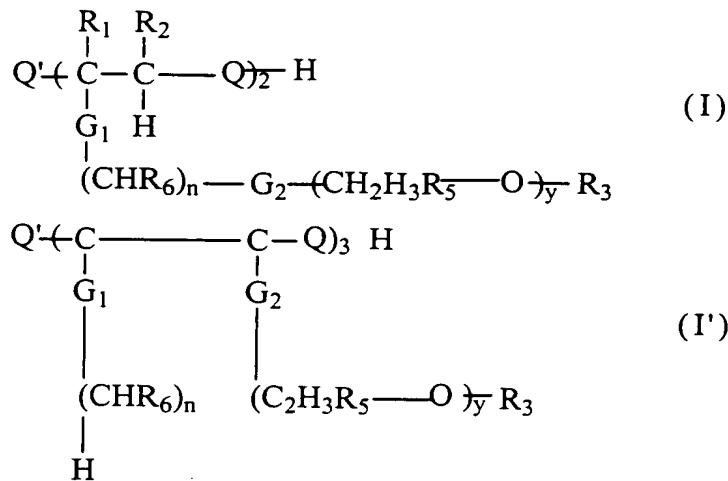
Claim 102. (Currently Amended) A method for preparing a drug targeting system for administering one or more physiologically effective substances to a mammal, said method comprising:

a) preparing nanoparticles made of a polymeric material, said nanoparticles being free of a surfactant surface coating and comprising said polymeric material and one or more stabilizers for said nanoparticles, said one or more stabilizers being selected from the group consisting of polysorbate 85, polysorbate 81, dextran 12,000, carboxylic acid esters of glycerol, sorbitan monostearate, sorbitan monooleate, polyoxamer 188, polyoxamines, alkoxylated ethers, alkoxylated esters, alkoxylated mono, di and triglycerides, alkoxylated phenoles and diphenoles, Genapol<sup>R</sup> compound, Bauki<sup>R</sup> compounds<sup>R</sup>, sodium stearate, metal salts of carboxylic acids, metal salts of alcohol sulfates and metal salts of sulfosuccinates and mixtures of two or more of said substances, wherein said Genapol<sup>R</sup> compounds are of the formula



wherein y is in the range of 4 to 18 and x is in the range of 1 to 18,  
and said Bauki<sup>R</sup> compounds are of the formulas (I) and (I')

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in which  $\text{R}_1$ ,  $\text{R}_2$ ,  $\text{R}_5$  and  $\text{R}_6$  are identical or different and represent hydrogen and a methyl or ethyl group,

$\text{Q}$  represents a valency, oxygen or an ester or amide bridge and  $\text{Q}'$  denotes hydrogen if  $\text{Q}$  represents a valency or oxygen, and is a hydroxyl or amino group if  $\text{Q}$  represents an ester or amide bridge,

$\text{x}$  is an integer from 3 to 50, if  $\text{Q}$  is a valency or oxygen, and an integer from 3 to 1000, if  $\text{Q}$  is an ester or amide function,  $\text{G}_1$  and  $\text{G}_2$  are a valency, oxygen or an ester or amide group, it being possible for the two groups to be identical or different,  $\text{n}$  is an integer from 4 to 44,  $\text{y}$  is an integer from 2 to 50, and  $\text{R}_3$  is hydrogen or a lower alkyl having 1-6 C atoms, and; by polymerizing one or more moriomeric or oligomeric precursors of said polymeric material or both, in the presence of said stabilizers;

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- b) loading one or more physiologically effective substances to be delivered to said mammal into or onto said nanoparticles or both; and optionally
- c) providing said loaded nanoparticles in a medium allowing the transport of said nanoparticles to the target within or on said mammal after administration.

Claim 103 (Previously Presented): The method of Claim 101, wherein said polymerization step is selected from the group consisting of emulsion polymerization, interfacial polymerization, solvent deposition, solvent evaporation and crosslinking oligomers or polymers or both, in solution.

Claim 104 (Previously Presented): The method according to Claim 101, wherein, in the polymerization step, a polymeric material is formed which is selected from the group consisting of polyacrylates, polymethacrylates, polycyanoacrylates, polyarylamides, polylactates, polyglycolates, polyanhydrides, polyorthoesters, gelatin, polysaccharides, albumin, polystyrenes, polyvinyls, polyacrolein, polyglutaraldehydes and copolymers and mixtures thereof.

Claim 105 (Previously Presented): The method of Claim 101, wherein said loading step comprises mixing said nanoparticles with a solution of said one or more physiologically effective substances and allowing a sufficient time for an effective amount of said one or more physiologically effective substances to be adsorbed onto or absorbed by said nanoparticles or both.

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Claim 106 (Previously Presented): The method of Claim 102, wherein said polymerization step is selected from the group consisting of emulsion polymerization, interfacial polymerization, solvent deposition, solvent evaporation and crosslinking oligomers or polymers or both, in solution.

Claim 107 (Previously Presented): The method of Claim 102, wherein, in the polymerization step, a polymeric material is formed which is selected from the group consisting of polyacrylates, polymethacrylates, polycyanoacrylates, polyarylamides, polylactates, polyglycolates, polyanhydrides, polyorthoesters, gelatin, polysaccharides, albumin, polystyrenes, polyvinyls, polyacrolein, polyglutaraldehydes and copolymers and mixtures thereof.

Claim 108 (Previously Presented): The method of Claim 102, wherein said loading step comprises mixing said nanoparticles with a solution of said one or more physiologically effective substances and allowing a sufficient time for an effective amount of said one or more physiologically effective substances to be adsorbed onto or absorbed by said nanoparticles or both.

Claim 109 (Previously Presented): The method of Claim 101, wherein said one or more stabilizers are selected from the group consisting of polysorbate 85 and dextran 12,000 and mixtures thereof and mixtures of said stabilizers with other stabilizers.

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Claim 110 (Previously Presented): The method of Claim 102, wherein said one or more stabilizers are selected from the group consisting of polysorbate 85 and dextran 12,000 and mixtures thereof and mixtures of said stabilizers with other stabilizers.

Claim 111 (Previously Presented): The method of Claim 101, wherein said one or more physiologically effective substances are selected from the group consisting of a therapeutic substance and a diagnostic substance.

Claim 112 (Previously Presented): The method of Claim 102, wherein said one or more physiologically effective substances are selected from the group consisting of a therapeutic substance and a diagnostic substance.

Claim 113 (Previously Presented): The method of Claim 101, wherein said one or more physiologically effective substances have central nervous system activity but cannot cross the blood brain barrier without modification or without a carrier.

Claim 114 (Previously Presented): The method of Claim 102, wherein said one or more physiologically effective substances have central nervous system activity but cannot cross the blood brain barrier without modification or without a carrier.

Claim 115 (Previously Presented): The method of Claim 101, wherein said one or

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more physiologically, active substances are selected from the group consisting of drugs acting at synaptic sites and neuroeffector junctional sites; general and local analgesics; hypnotics and sedatives; drugs for the treatment of psychiatric disorders; anti-epileptics and anticonvulsants; drugs for the treatment of Parkinson's and Huntington's disease, aging and Alzheimer's disease; excitatory amino acid antagonists, neurotrophic factors and neuroregenerative agents; trophic factors; drugs aimed at the treatment of CNS trauma or stroke; drugs for the treatment of addiction and drug abuse; antacoids and anti-inflammatory drugs; chemotherapeutic agents for parasitic infections and diseases caused by microbes; immunosuppressive agents and anticancer drugs; hormones and hormone antagonists; heavy metals and heavy metal antagonists; antagonists for non-metallic toxic agents; cytostatic agents for the treatment of cancer; diagnostic substances for use in nuclear medicine; immunoactive and immunoreactive agents; transporter inhibitors; antibiotics; antispasmodics; antihistamines; antinauseants; relaxants; stimulants; sense and antisense oligonucleotides; cerebral dilators; psychotropics; antimanic; vascular dilators and constrictors; anti-hypertensives; drugs for migraine treatment; hypnotics, hyperglycemic and hypoglycemic agents; minerals and nutritional agents; anti-obesity drugs; anti-asthmatics; and mixtures thereof.

Claim 116 (Previously Presented): The method of Claim 115, wherein said psychiatric disorders comprise depression and schizophrenia.

Claim 117 (Previously Presented): The method of Claim 102, wherein said one or

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more physiologically active substances are selected from the group consisting of drugs acting at synaptic sites and neuroeffector junctional sites; general and local analgesics; hypnotics and sedatives; drugs for the treatment of psychiatric disorders; anti-epileptics and anticonvulsants; drugs for the treatment of Parkinson's and Huntington's disease, aging and Alzheimer's disease; excitatory amino acid antagonists, neurotrophic factors and neuroregenerative agents; trophic factors; drugs aimed at the treatment of CNS trauma or stroke; drugs for the treatment of addiction and drug abuse; antacoids and anti-inflammatory drugs; chemotherapeutic agents for parasitic infections and diseases caused by microbes; immunosuppressive agents and anti-cancer drugs; hormones and hormone antagonists; heavy metals and heavy metal antagonists; antagonists for non-metallic toxic agents; cytostatic agents for the treatment of cancer; diagnostic substances for use in nuclear medicine; immunoactive and immunoreactive agents; transporter inhibitors; antibiotics; antispasmodics; antihistamines; antinauseants; relaxants; stimulants; sense and antisense oligonucleotides; cerebral dilators; psychotropics; antimanic; vascular dilators and constrictors; anti-hypertensives; drugs for migraine treatment; hypnotics, hyperglycemic and hypoglycemic agents; minerals and nutritional agents; anti-obesity drugs; anti-asthmatics; and mixtures thereof.

Claim 118 (Previously Presented): The method of Claim 117, wherein said psychiatric disorders comprise depression and schizophrenia.

Claim 119 (Previously Presented): The method of Claim 101, wherein said diagnostic

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substance is selected from the group consisting of substances for nuclear medicine and radiation therapy.

Claim 120 (Previously Presented): The method of Claim 102, wherein said diagnostic substance is selected from the group consisting of substances for nuclear medicine and radiation therapy.

Claim 121. (Previously Presented): The method of Claim 101, wherein said medium allowing the transport of said nanoparticles to the target within said mammal after administration is selected from the group consisting of water, physiologically acceptable aqueous solutions containing salts or buffers or a mixture thereof, and any other solution acceptable for administration to a mammal.

Claim 122 (Previously Presented): The method of Claim 102, wherein said medium allowing the transport of said nanoparticles to the target within said mammal after administration is selected from the group consisting of water, physiologically acceptable aqueous solutions containing salts or buffers or a mixture thereof, and any other solution acceptable for administration to a mammal.

Claim 132 (Previously Presented): The method of Claim 101, wherein said nanoparticles are made of polybutylcyanoacrylate.

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Claim 133 (Previously Presented): The method of Claim 102, wherein said nanoparticles are made of polybutylcyanoacrylate.

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**BASIS FOR THE AMENDMENT**

Claims 101 and 102 have been amended as supported at page 16, lines 9-23 of the specification as amended May 29, 2002.

No new matter is believed to have been added by entry of this amendment. Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 101-122, 132 and 133 will now be active in this application.